

What is claimed is:

1. A voltage boosting circuit comprising:

an oscillator circuit which sends a plurality of oscillating signals differing in edge timing from each other;

5 a plurality of pumping circuits provided in corresponding to the oscillating signals, each of which performs a boosting operation by charging and discharging a pumping capacitor by using the corresponding one of the oscillating signals, and which generate a boosted voltage by combining their outputs signals;

10 a boosting power control circuit which controls the boosting power of each of said pumping circuits in response to an enable signal; and

an enable circuit which counts the number of the edges of at least one of the oscillating signals, and which generates the enable signal to instruct said boosting power control circuit to reduce the boosting power of
15 said pumping circuit until the count value becomes a set value.

2. The voltage boosting circuit according to claim 1, wherein said boosting power control circuit includes a plurality of latch circuits provided in corresponding to the oscillated signals, each of which stops and starts the
20 corresponding one of said pumping circuits for the voltage boosting by stopping and starting transmission of the oscillating signal to said pumping circuit in response to the enable signal.

3. The voltage boosting circuit according to claim 1, wherein said
25 boosting power control circuit controls the boosting power of each of said

pumping circuits by changing, in response to the enable signal, drive power for charging and discharging the pumping capacitor in said pumping circuit.

4. The voltage boosting circuit according to claim 3, wherein said
5 boosting power control circuit has an inverter for additionally charging and discharging the pumping capacitor, and controls the boosting power by controlling transistors constituting the inverter in response to the enable signal.

10 5. The voltage boosting circuit according to claim 1, wherein said enable circuit is capable of setting the set value for each of said pumping circuits.

6. The voltage boosting circuit according to claim 1, further
15 comprising a boosted voltage level determination circuit which compares the boosted voltage with a set voltage and determines that the boosting operation should be started when detecting a state in which the boosted voltage is lower than the set voltage.